How influenza affects the workforce and how employers can make a difference
Influenza Basics

What is seasonal influenza?
Seasonal influenza ("the flu") is a respiratory illness caused by the influenza virus, which usually circulates between November and April in Canada. This highly contagious illness typically starts with a headache, chills and cough, followed rapidly by fever, loss of appetite, muscle aches and fatigue, running nose, sneezing, watery eyes and throat irritation. Even a "standard" bout of the flu can keep people away from work for up to a full business week, while the cough and fatigue can persist for several weeks, thus delaying the return to full personal and professional efficacy.2

How is influenza spread?
Influenza spreads through droplets that have been coughed or sneezed by someone who already has the flu. It can also be spread with direct contact with hands, objects or surfaces (e.g., desks, writing implements) that have been contaminated by the influenza virus.

How is the flu different from a cold?
The viral culprit behind a cold is a rhinovirus, rather than an influenza virus. While influenza is generally more severe than a cold, symptoms may overlap to a degree. The biggest clue that it's a flu: flu symptoms come on more abruptly and intensely than cold symptoms. The following table outlines the key similarities and differences between cold and flu symptoms.5

Can it lead to more serious illness?
The flu is by no means a trivial illness: every year in Canada, 2,000 to 8,000 people die from the flu or complications of the disease, such as pneumonia. The flu also leads to an average of 20,000 hospitalizations per year.1,6 Complications are most likely to arise in high-risk groups, which include:7
- Children six to 23 months
- People aged 65 years and older
- Pregnant women
- Adults and children with chronic heart disease
- Adults and children with lung disease such as asthma, chronic obstructive pulmonary disease (COPD), emphysema or chronic bronchitis

How does it differ from pandemic influenza?
A flu pandemic occurs when a new influenza virus (to which people have little or no immunity) emerges, causing serious illness and spreading easily throughout the world. The following table outlines some of the key differences between pandemic and seasonal influenza:3,4

Aspect | Seasonal | Pandemic
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Outbreaks | Follow predictable seasonal patterns (annually between November and April in temperate climates) | Many years may pass between pandemics (only three occurred in the 20th century)
The virus comes back in "waves," with the second and third waves often more severe

Immunity | Some immunity generally developed from previous exposure | Little or no pre-existing immunity

Symptoms | Commonly fever, cough and muscle aches | May be more severe, with a greater likelihood of complications

Complications | More likely in people with underlying health conditions | Healthy adults may be at increased risk of serious complications
Anti-influenza drugs (antivirals), which are available by prescription, must be started early in order to work effectively. They can shorten the duration of symptoms by about three days if taken within 12 hours of the onset of symptoms and by about 1.5 days if taken within 48 hours of symptom onset.

A doctor should be consulted if:

- A person with influenza develops worsening symptoms such as shortness of breath, chest pain or signs of dehydration
- A person with a condition that increases the risk of flu complications develops flu-like symptoms

Can it be prevented?

“The best protection against influenza is getting the flu shot every year and practicing basic hygiene,” says Dr. Danielle Grondin, Director General of Policy Integration, Planning, Reporting and International Directorate at the Public Health Agency of Canada (PHAC). “For a detailed discussion of influenza vaccination, see the next section.” Along with vaccination, the PHAC recommends the following strategies to reduce the risk of catching or spreading the flu:

- Washing hands often with soap and warm water for at least 20 seconds, or using hand sanitizer
- Keeping hands away from the face
- Coughing and sneezing into the arm rather than hands
- Disposing of tissues as soon as possible and washing hands afterward
- Keeping common surface areas (e.g., light switches, telephones, keyboards) clean and disinfected
- Staying at home when ill.

What have we learned from the 2009/10 H1N1 pandemic?

Overall, the pandemic was a good “rehearsal” for the future, says Dr. Karl Weiss, an infectious disease specialist at Hôpital Maisonneuve-Rosemont in Montreal. “Canada was quite successful compared to many other countries,” he explains. “We were able to immunize over 50% of the general population. By contrast, only 20 to 30 percent of Canadians get the seasonal flu vaccine in a typical year – a rate Dr. Weiss hopes to see climb, as “immunization breaks the cycle of transmission.” The pandemic also “raised awareness of influenza and respiratory infections in general, leading to improved hygienic practices such as routine hand-washing and a much better knowledge of respiratory etiquette.”

How is it treated?

The following home remedies may help alleviate some flu symptoms:

- Getting plenty of rest
- Drinking a lot of extra fluids to replace those lost from fever
- Refrain from breathing other people’s second hand smoke
- Breathing moist air from a hot shower or a sink filled with hot water (to help clear a stuffy nose)

Over-the-counter medications (e.g., acetaminophen, ibuprofen) may help relieve symptoms such as pain and fever.

How does the seasonal influenza vaccine (“flu shot”) work?

The flu shot is an inactivated vaccine (containing killed virus) that is given with a needle, usually in the arm. It contains three seasonal influenza viruses that are grown in eggs. The seasonal flu vaccine protects against the three influenza viruses that are expected to be most common during the upcoming season. Because the viruses that cause influenza mutate from year to year, the vaccine is updated every year to match the strains expected to circulate in that year. The 2010-2011 vaccine, for example, offers protection against the 2009 H1N1 strain, a H3N2 strain, and an influenza B virus. To achieve the best protection possible, people must get immunized every year because:

- Immunity from a flu shot usually lasts less than a year
- Immunity to the previous year’s flu viruses does not necessarily protect against this year’s strains
How effective is it?
Protection from the vaccine develops about one to two weeks after the shot. While its effectiveness varies from person to person, overall it prevents influenza in 70 to 90 percent of healthy adults. In older people, it can prevent pneumonia and hospitalization in about six out of 10 cases. Even in the minority of cases when vaccination doesn’t prevent an individual from getting the flu, it can help reduce the severity of the illness.

Who should be vaccinated?
The short answer: the more people, the better. In fact, The National Advisory Committee on Immunization (NACI) currently recommends vaccination for all Canadians over six months of age. “For the general population, immunization is encouraged for economic purposes and for stopping the spread of the virus in the community,” says Dr. Weiss, explaining that “immunization breaks the cycle of transmission: the more people immunized, the better the level of protection in the population.”

While the flu shot has value for everyone, high-risk groups stand to benefit the most. In the workplace, high-risk groups include people with underlying illnesses such as diabetes, heart disease or lung disease, as well as pregnant women, whose lungs become more vulnerable later in pregnancy. Priority should also be given to those people at high risk of infecting many other people, such as healthcare workers.
workers. “I myself get the flu vaccine every year, primarily for this reason,” says Dr. Allison McGeer, an infectious disease consultant at Mt. Sinai Hospital in Toronto. Vaccinating school children is advisable from a herd-immunity perspective, as the disease spreads especially rapidly among school children, notes Dr. David Scheifele, director of the vaccine evaluation program at the Child and Family Research Institute in Vancouver. “Parents whose children have the flu may need to take time off from work, leading to a significant loss of productivity,” he adds.

“Healthy people should get vaccinated to protect themselves and their families from influenza, to avoid missing quality time (including holidays) with their families, to avoid losing time from work, and to avoid spreading the virus to others.”

— Ontario Ministry of Health and Long-Term Care

The flu shot may be unsuitable for people who:

— Have ever had a severe allergic reaction to eggs
— Had a severe reaction to a previous flu shot
— Have a history of Guillain-Barré Syndrome that occurred after receiving a flu shot

In addition, people who are sick with a fever when they go to get their shot may need to postpone the shot to a later date.

How safe is the vaccine?

Yearly studies conducted by the Influenza Research Network and the Public Health Agency of Canada have established the vaccine’s safety, says Dr. McGeer, adding that “an even more relevant question is whether getting vaccinated is safer than not getting vaccinated.” The answer is a clear yes, she says. “Even for healthy adults, let alone those with underlying illness, the risks of influenza each year are much greater than the risks of the influenza vaccine.”

That said, some people do experience side effects from the vaccine. The most common side effect is soreness at the site of injection, which may last a couple of days. Fever, fatigue and muscle aches may also occur. The risk of developing Guillain-Barré syndrome, an autoimmune disorder affecting the peripheral nervous system, following the vaccine is about one in a million — far lower than the risk that a healthy adult will die from influenza — and most patients recover fully.

One ingredient in the flu vaccine, thimerosal, has received some negative publicity because it contains an extremely small amount of mercury. However, NACI has reviewed the latest science and concluded that there is no legitimate safety reason to avoid getting the vaccine.

Setting up a flu clinic

Why do it?

Paula Allen, vice-president of organizational solutions at shepell fgi, maintains that employers underestimate the costs of influenza in the workplace. “Absent workers lead to greater stress on other employees, which results in missed deadlines and customer complaints,” she explains. “People who contract influenza are often still at work at the beginning of the illness, when they’re most contagious, so they’re liable to transmit the disease to other employees, which perpetuates the cycle of workplace disruption.” Allen views workplace immunization programs as a way to break this cycle.

More immunization translates to fewer cases of influenza, fewer workdays missed, and fewer workdays spent in a state of physical and mental sluggishness. Researchers at the University of Minnesota have estimated that immunizing healthy working adults
against influenza reduces absences from upper respiratory illness by 43 percent and related visits to doctors’ offices by 44 percent.1 

One might assume that employees would get their flu shot at a public clinic or at their doctor’s office. The sobering reality is that many don’t. “People don’t get immunized for a variety of reasons, including the inconvenience of scheduling a visit to a clinic, dislike of needles and worrying about side effects,” says Dr. Schabas. “If you can remove the inconvenience barrier, it’s a big help.” Indeed, studies show that up to 45 percent of employees are more likely to obtain a flu shot if it is available at a workplace clinic.4 It appears that many employers appreciate their important role in this regard: a 2010 survey conducted by the International Foundation of Employee Benefit Plans found flu shot programs to be the most prevalent workplace initiative among Canadian employers, with 71 percent of survey respondents offering such programs.12

What is involved?
There are two ways of holding a flu shot clinic: getting your own occupational health services staff to run it or arranging for a third-party healthcare agency to run it on your behalf. If you decide to run the clinic internally, call your public health unit to obtain the comprehensive implementation package, which provides information on how to order the vaccine, organize and run the clinic. If you decide to have a healthcare agency run the clinic for you, arrange for an appointment to discuss the logistics.
The best time to set up a clinic is in October to mid-November, before the start of the flu season. This gives time for immunized individuals to build protection against the virus.1 That said, the flu shot can protect individuals at any point during the flu season. A health professional should screen employees prior to immunization to determine whether there are any reasons for not receiving the vaccine, such as egg allergy, fever, active infection or sensitivity to thimerosal.13 (This service is provided by third-party health agencies.)

To enhance the value of the clinic,

**ONE STEP AT A TIME**

The Canadian Coalition for Immunization Awareness and Promotion has prepared a step-by-step procedural guideline for employers interested in setting up flu shot programs at work.14 The Coalition’s recommendations are summarized below:

**STEP 1**
Educate yourself about the impact of influenza on health and workplace absenteeism and the benefits of immunization.

**STEP 2**
Review the facts with management, employees and unions.

**STEP 3**
If you decide to hold a clinic, assign an individual or small group to organize it, or hire a third-party agency to conduct it and assist with logistics. You may want to set a goal for the percentage of individuals to be immunized. A reasonable goal for most workplaces is 30 percent of employees.

**STEP 4**
Advertise the clinic and distribute information to all employees, using templates available online (e.g., at www.immunize.ca, www.beattheflu.ca) and/or handouts from your local public health office.

**STEP 5**
Provide a comfortable, private location for the clinic. Consider providing light refreshments and advertising your progress toward the target number of individuals.

Dr. David Mowat, Medical Officer of Health for the Region of Peel in Ontario, advises employers to adopt the following measures:

— Disseminate information about avoiding and coping with the flu
— Provide alcohol-based hand sanitizer in the workplace
— Create human resources policies that support staying at home when ill.

What are the costs – and returns – of a flu shot program?
The Public Health Agency of Canada recommends workplace immunization programs as a cost-effective method to protect against seasonal influenza. Private agencies usually provide the vaccine, information and consent forms for a reasonable fee – often less than $20 per individual.14 This outlay pales in comparison to the return on investment for workplace flu shot programs, which has been pegged at $55.86 per vaccinated individual in one Canadian study.4 In an organization of 100 individuals, a flu shot program with an uptake of 40 percent can pay for itself if influenza is avoided in just one employee.1 According to Allen, “the cost per employee is much lower than just one hour of absence from work.”

What are some tips for ensuring the program’s success?
Communication, communication, communication, say the experts. “Research has shown that raising awareness is the most important component when you’re trying to help people make a behavioural change,”
says Stan Murray, director of healthy workplace programs at the National Quality Institute in Toronto. “The more advance notice and information you give people, the more likely they’ll make the change.”

Allen concurs. “Treat the clinic like a business meeting,” she advises. In her experience, “it doesn’t work if you wait until Thursday before letting people know that the clinic is happening the following Tuesday. You have to remind them well in advance – and more than once – that the clinic is coming up. You also have to explain its value to them.” Employers can use posters, personal emails, reminders attached to cheque stubs and/or Intranet bulletins to keep their employees in the loop.

Also key to a clinic’s success: “Make it easy for people to book an appointment and get their shot,” says Allen. “If possible, offer clinics on more than one day, so employees can choose the most convenient day for them. It’s also preferable to have them sign up for a specific time, so there’s no lineup.”

In Allen’s experience, a well organized clinic can draw between 30 and 50 percent of an organization’s employees. “That’s significantly higher than the uptake in most community clinics.”

■ CASE STUDY
Company: Rogers Communications Inc.

Rogers Communications Inc. is a leading provider of digital cable television, high-speed Internet, telephone, publishing and other communications services to Canadian consumers and businesses. Headquartered in midtown Toronto, the company currently employs about 31,000 people throughout Canada. Having run influenza vaccination clinics across Canada for many years, the organization has had the opportunity to fine-tune its approach to ensure the clinics meet their medical and business objectives. For starters, the why: “To put it simply, it’s the right thing to do,” says Dr. David Satok, the company’s corporate medical director. “We want to protect our employees and keep them healthier. If we can accomplish this, we’re way upstream.”

The company engaged third-party health agencies to set up the clinics and provide the shots. “The setup can vary from centre to centre, because we’re so spread out and our centres range widely in size,” notes Satok. The company’s own occupational health nurses collaborate with the third-party providers in the two Rogers corporate centres (in Toronto and Brampton, Ont.).

Employees sign up for flu clinics via the company’s online Intranet health portal, called bwell, selecting the time they wish to attend. “We just started using this system a year ago, and it’s made signup a lot easier to administer,” says Satok. “We know in advance whether 30 or 300 people will be showing up, so we know how much vaccine we’ll need and can plan accordingly.” The employee also benefits: “If she knows her appointment is at 3:15 p.m., that’s when she shows up, rather than lining up at an all-day clinic and waiting her turn.” Emails and printed posters help generate extra buzz about upcoming clinics, and the company is now looking into the feasibility of adding personal text messages to the promotional mix.

Before Rogers rolls out one of its flu clinics, a target minimum attendance number is set and the clinic may be postponed if the target isn’t reached. “It obviously wouldn’t make sense for us to run a clinic for a single individual in a remote location,” he says. “It’s important to take both employees’ health and economic realities into consideration.”

At Rogers, the clinics more than pay for themselves, says Satok. “We did a business analysis before launching our whole wellness program,” he explains. “We determined that our return on investment is $3 for every dollar spent on all our wellness initiatives, including the flu clinics.” As for employees, Satok says they’ve been “raving” about the accessibility of the flu clinics. “An on-site flu clinic removes what research has shown are considerable barriers – time and effort – from the equation,” he says. “Make it simple for employees and they’ll come.”
A GOOD FIT FOR ALL SIZES

Running flu clinics is straightforward enough that even modestly sized organizations can take the plunge. “Reducing absenteeism is very beneficial in most industries,” notes Stan Murray, director of healthy workplace programs at the National Quality Institute in Toronto. “If you can prevent even one person from getting the flu, the organization benefits, and you often get a robust cost-benefit ratio.” Dr. David Satok, corporate medical director at Rogers Communications Inc., takes a similar view. “There’s nothing Rogers does with flu clinics that a smaller organization couldn’t replicate,” he says. “With the Internet and other technological tools available to just about every organization today, you can set these things up with very little fuss, whether you do it in-house or with an external provider.” An added bonus for employers new to the game: “These clinics represent an opportunity for team building, both at the administration and participation level. It’s showing that the employer cares.”

References
5. Do you have a cold or flu? WebMD flu guide. www.webmd.com/cold-and-flu/flu-guide/is-it-cold-flu

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